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Page 1299

## TRENDS IN REVISING ZONING ORDINANCES

*What have been the trends in zoning in recent years? Why is there no "model" zoning ordinance for individual cities? What are the more important developments which should guide the revision of zoning ordinances?*

Zoning is a major planning tool in giving effect to the provisions of that portion of the comprehensive city plan which is primarily concerned with the use and development of privately owned land. The zoning ordinance consists of two parts: (1) a map or maps showing the different districts into which the area of the entire community is divided, and (2) a written text setting forth the definitions and regulations that apply to each of the districts, administrative provisions, and procedures for enforcement and appeals.

Basically the zoning ordinance divides the community into districts for the purpose of regulating the use of land and buildings, the height or bulk of buildings, the proportion of lot that may be covered, and the density of population. Zoning regulations are enacted under the police power of the state for the purpose of promoting the health, safety, and general welfare of the people of the community. To be effective as well as legally defensible, a zoning ordinance must be comprehensive in character — that is, it must apply to the entire area of the community and to all types of land use.

The first comprehensive zoning ordinance in the United States was adopted in 1916 by New York City. Ten years later the United States Supreme Court upheld the constitutionality of reasonable zoning regulations in the landmark case of *Village of Euclid, Ohio v. Ambler Realty Co.*, 272 U. S. 365, 47 S. Ct. 114 (1926). In 1955, 1,186 cities over 5,000 population had adopted comprehensive zoning ordinances, according to the 1955 Municipal Year Book.

While the constitutionality of zoning has been established for 30 years, the 10 years since World War II have seen the greatest number of adoptions of either revised or new zoning ordinances. Table 1 summarizes the year of adoption for 1,092 reporting cities over 5,000 population with zoning ordinances in 1955. Of these 1,092 cities, 22 per cent had ordinances adopted prior to 1946; 71 per cent had ordinances adopted between 1946 and 1954; and 7 per cent were revising their ordinances in 1955.

The number of cities revising zoning ordinances is tacit recognition of changing communities. The modern zoning ordinance attempts to meet the present-day needs of changing urban society. The major characteristics that are relatively recent in zoning ordinances illustrate this point:

1. Zoning stresses permitted rather than prohibited uses in various districts. In addition uses often are not allowed to accumulate from one district to another. The industrial district, for example, is reserved for permitted manufacturing and accessory uses rather than as a miscellaneous area where every use is allowed.
2. Performance standards have been established in a few cities in an attempt to measure the external effects of industry upon adjacent areas. More weight is given to the actual and potential effect of the plant than to the type of plant.
3. Residential dwelling standards have changed drastically, even in small communities.



For most communities the zoning ordinance must help in accommodating rather than eliminating such types of housing as trailers, auto courts, rooming houses, prefabricated dwellings, and college dormitories.

4. Indirect control of automobile traffic congestion is achieved through population density standards, employment density standards, and requirements for off-street parking and off-street truck loading.

5. Many new types of districts are found in ordinances including special districts for planned development of garden apartments and industrial parks, shopping centers, airports, and educational-research facilities.

Table 1  
YEAR OF ZONING ORDINANCE ADOPTIONS

Population Group	No. of Cities Reporting	1939 and Earlier	1940-1945	1946-1950	1951-1954	Being Revised in 1955
Over 500,000 . . . . .	13	3	1	3	3	3
250,000 to 500,000 . . . .	20	7	1	2	7	3
100,000 to 250,000 . . . .	54	17	6	10	17	4
50,000 to 100,000 . . . .	97	15	9	34	28	11
25,000 to 50,000 . . . .	174	23	21	65	58	7
10,000 to 25,000 . . . .	416	47	48	123	171	27
5,000 to 10,000 . . . .	318	27	16	97	158	20
All Cities over 5,000 . .	1,092	139	102	334	442	75

Source: The 1955 Municipal Year Book, pp. 294-295.

It is the purpose of this report to review the newer methods and techniques in zoning which meet present-day needs. Subsequent sections deal with the "model" zoning ordinance; zoning controls in unincorporated fringe areas; special districts; performance standards; lot area and building bulk controls; transitional zoning; off-street parking and loading; auto courts and trailer camps; and nonconforming uses.

These are the major developments in zoning which warrant consideration by city officials in drafting or revising their own ordinances. Some of these methods are still experimental and highly controversial. Not all of these methods are necessarily suitable for a given city. In addition, it should be stressed that an effective zoning ordinance must be based on a land use plan. This means obtaining the services of qualified planners.

#### Why Is There No "Model" Zoning Ordinance?

An official in a city without a zoning ordinance or faced with revision of an antiquated ordinance may seek a "model" ordinance or an ordinance from a similar city as a guide in the preparation of a zoning ordinance for his own city. While there are useful model ordinances on a wide variety of municipal activities, this is not the case in zoning.

Although the principles involved in zoning are generally the same for all cities, each zoning ordinance must be tailored to the land use for the city in which it will be applied. The zoning ordinance is a planning tool that should be developed in conjunction with a master plan of development for the community. An important component of the master plan is a land use plan which determines within certain limits where people will live in the city, where they will work, and where they will shop. The zoning ordinance is a means of enforcing this land use plan.

Since a zoning ordinance properly reflects the land use plan, it cannot be achieved by merely following the provisions of a model ordinance or copying the ordinance of another community.



### Zoning Controls in Unincorporated Fringe Areas

The rapid urban growth of unincorporated fringe areas adjacent to both large and small cities has created many governmental problems. Considerable research and study is currently under way to develop adequate solutions to the governmental problems arising from fringe area growth, and some experiments are being studied to establish area-wide governments for metropolitan areas. Many cities have controlled fringe growth through annexation. In many cases, however, annexation is not possible or perhaps even desirable.

Since fringe areas are characterized by urban growth as such, the use of planning powers, including both zoning and subdivision regulations, is often advocated as a means to provide for orderly development of unincorporated areas on the perimeter of the city. Zoning in the unincorporated fringe, known as "extraterritorial zoning," can be justified for three principal reasons, according to the American Society of Planning Officials in their Planning Advisory Service Report No. 42, "Extraterritorial Zoning" (September, 1952, 34pp.).

First, planning and zoning powers should be exercised throughout the entire community despite arbitrary political boundaries which bear no relationship to the economic and social community. Second, unzoned fringe areas can have damaging effects upon near-by property lying within the city. Without zoning controls there is no guarantee that proper use will be made of fringe properties nor that proper height and area requirements will be met even if the use is suitable. Third, and perhaps most important, unincorporated fringe areas generally are next in line for annexation. In the absence of zoning the city inherits the deficiencies of uncontrolled growth including undersized developments, crowded dwellings, and pre-existing, nonconforming uses.

The use of extraterritorial zoning is quite limited because the majority of states have not seen fit to give cities this power. A special study of fringe area conditions of 174 cities selected from all population classes over 5,000 and from all geographical sections of the United States was made for the 1954 Municipal Year Book. Although 85 per cent of the cities had comprehensive zoning ordinances, only 9 per cent were empowered to extend their zoning authority beyond the city limits.

The extent of this infrequent extraterritorial power also is quite limited. About one-half of the cities could enforce zoning standards up to three miles beyond the city; an additional one-fourth had jurisdiction for five miles; but the remaining one-fourth had authority for only one or two miles. Even where the authority exists, the city often can control only a portion of the fringe growth since development does not necessarily radiate in a solid belt from the city.

Most cities with extraterritorial zoning jurisdiction are located in counties which do not have authority to zone. If a city is located in a county which has authority to zone unincorporated areas, the problem of extraterritoriality becomes more complicated since there cannot be overlapping jurisdictions. In such cases the problem of zoning in the urban fringe must then be solved by co-operation between the two local governments.

County planning and zoning is found in a number of states including California, Maryland, Michigan, New York, Ohio, and Pennsylvania. A study of 174 urban counties over 100,000 population in the 1954 Municipal Year Book shows that 67 counties have comprehensive zoning ordinances controlling unincorporated areas.

Township planning and zoning as used in Michigan and Ohio is still another approach to controlling the urban fringe. Townships in Michigan have zoning powers similar to those of counties in controlling territory outside the limits of incorporated cities and villages. Counties and townships can regulate land use, location and size of buildings, safety and public health standards, and other aspects of zoning. Michigan townships also can regulate land use for migratory labor camps, tents, and trailer coaches.

Some cities have voluntarily appointed fringe residents to commissions administering zoning or they have asked a county governmental official to assist in the writing of the enacting ordinance. Cities in states not possessing enabling legislation for extraterritorial zoning may be able to achieve extraterritorial jurisdiction through city-county cooperation. Such an arrangement has been successful in the Wichita, Kansas, metropolitan area where the city exercises its authority



to zone land three miles beyond the city limits in the unincorporated portion of the county. The city and county planning commissions have agreed to use one technical staff, and in turn the staff coordinates the proposals of the two commissions.

### Special Districts

Special districts have been designated in a few zoning ordinances in recent years in an attempt to give practical recognition to specialized land use requirements that are not readily classified as residential, commercial, or industrial. Principal uses in special districts often are subject to some type of administrative review before building and occupancy permits are granted, and higher development standards may be specified. Examples of such special districts include planned developments for garden apartments, shopping centers, and industrial parks; open land use for agriculture and golf courses; airports; educational-research facilities; and summer colony districts for resort communities.

Planned shopping districts or shopping centers comprise the fastest growing type of special district. Such a center is a group of retail stores located away from the central business district with off-street parking. It serves suburban, outlying, or fringe area patronage. The Bismarck, North Dakota, ordinance contains good provisions for shopping centers including permitted uses, lot areas, floor area ratios, height limits, and off-street parking and loading standards.

Parsipanny-Troy Hills, New Jersey, has a specialized economic development district established "...to permit and encourage within the Township a class of uses which will (1) provide primary employment for the labor supply that is resident in the Township and vicinity (and) (2) return a fair and reasonable share of the revenues...that are necessary for the most efficient and sound provision of the public facilities and governmental services that are required for the most beneficial use of land in the Township..." The uses permitted in the district include executive and administrative offices, scientific and research laboratories, light manufacturing, and agriculture. All residential and other commercial uses are prohibited except as accessory uses. Performance standards have been established for the permitted uses in the district.

Two other types of special districts — the summer colony district and the tourist zone — are described below in the section on motels and trailer camps.

Special districts should not be confused with the "special use permit." The special district as stated above is a district to serve specialized land uses. The special use permit is issued by the planning or zoning board for the privilege of a particular land use in a given district (usually residential). It must be applied for in every instance. In practice the special use permit has been used as a device to exclude "undesirable" schools, churches, hospitals, and other community facilities from residential districts. The permit too often is issued by a nonelected board guided by vague or nonexistent standards in the ordinance. The legal questions of the special use permit, the zoning variance, and spot zoning are stated with critical insight by Walter H. Blucher in his paper "Is Zoning Wagging the Dog?" which appears in "Planning — 1955" (American Society of Planning Officials, 1313 East 60 Street, Chicago 37. 1956. \$4).

### Industrial Performance Standards

Performance standards for industrial zoning are objective standards designed to measure the external effects of industry upon adjacent uses and the entire community. Performance standards were first proposed in 1951 and since then at least 11 zoning ordinances have been proposed or adopted with performance standards as the predominant basis for industrial districts. Traditionally industry has been arbitrarily segregated into use districts, such as "heavy" and "light" industry, on the basis of their actual and potential characteristics. The industries and processes permitted in each district have been named specifically with the objective of assigning them to or excluding them from districts on the basis of types and functions.

This system has several disadvantages. The practice of listing or classifying permitted uses to keep similar industries together in conventional industrial districts falls short of zoning in



relation to performance. The name of a particular industry does not determine whether it is objectionable. It is the external effect of the industrial operations that counts. Uses or processes bearing the same name or description may show a wide variation in the creation of nuisances.

It is possible that a particular establishment belonging to an industry classified as free from nuisance may actually be objectionable due to its sheer size of operation. On the other hand, a non-noxious industry may be forced to locate in a zone of noxious uses merely because it belongs to a classification which traditionally has been labeled as noxious.

The effect of an industry on its environment is more important as a means of classification than is any material, process, or product classification. Smooth-running modern presses, for example, have largely eliminated vibration in certain types of metal working operations. Electric power and smokeless fuels have made many plants less offensive.

It is almost impossible to include all of the possible permitted industrial uses even in the most cumbersome and lengthy listings. For this reason many zoning ordinances contain a catch-all provision which permits: "Any other lawful use which is not obnoxious by reason of its creation of noise, odor, glare, dust, or excessive vibration." Such a phrase frequently is put at the end of the list of specific uses permitted in the least restricted industrial district. The concept is refined by substituting objective measurements for the idea of "obnoxious" and extending the descriptions by measurement to all industrial districts to replace the specific lists of permitted industrial uses.

Performance standards incorporating numerical measurements have been developed for most of the following external effects of industry: noise, smoke, odor, dust and dirt, noxious gases, glare and heat, fire hazards, industrial waste, transportation and traffic, vibration, electromagnetic interference, and radioactive emissions.

Some of the standards now in use have been adapted for industrial zoning from research conducted for other purposes while others have been developed specifically for use in zoning ordinances. The city of Chicago, for example, paid the Illinois Institute of Technology approximately \$12,000 to develop appropriate performance standards for its proposed revised zoning ordinance. Although other cities and towns have hired scientists in various fields to develop standards, none of the standards now in use can be considered definitive except possibly for the specific conditions for which they were prepared. In Table 2 are shown the different standards used in 11 ordinances in which performance standards have been proposed.

Existing standards appear to be reasonably effective in controlling the following effects: smoke, dust and dirt, industrial wastes, glare, and heat. Smoke is usually regulated in terms of visible emissions, measured by either the Ringelmann Chart or the umbrascoper. Some ordinances permit emissions of as much as 60 per cent opacity (a reading of 3 by Ringelmann Chart) while others require that only smokeless fuels may be burned in certain districts. Standards for limiting smoke emission have probably been the easiest of all to determine because of extensive experience with abatement ordinances. In establishing smoke standards the control must be consistent with the over-all municipal smoke control ordinance.

Dust and dirt emissions are regulated by specifying a maximum permitted volume in size of particulate matter. A typical provision is that of the zoning ordinance of Warren Charter Township, Michigan, adopted in 1952: "Smoke, dust, dirt, and fly ash shall not exceed 0.3 grains per cubic foot of flue gas at stack temperature of 500 degrees Fahrenheit and shall not exceed fifty (50) per cent excess air . . ."

The proposed Chicago ordinance undoubtedly includes the most detailed standards with reference to dust and dirt. The provision contains an involved method of calculating emissions as well as tables for adjusting measurements for different heights of emissions, velocities, and temperatures. Although the provision of the proposed Chicago ordinance are probably the best yet developed, they would not be suitable for small cities since measurements require the use of expensive equipment. The simpler provisions of other ordinances generally are felt to be adequate.

Glare and heat from industrial operations can be measured — glare in foot candles; heat in calories, degrees of temperature, or BTU's. However, performance zoning ordinances typically



Table 2

## INDUSTRIAL ZONING STANDARDS

Ordinance	Number of Industrial Zones	Noise	Smoke	Odor	Dust and Dirt	Toxic Gases	Heat and Glare	Fire and Safety	Sewage	Vibration	Electromagnetic Interference	Radioactive Emissions
Albuquerque, N. M.	3	#	#	P	#					P		
Anne Arundel County, Md.	2	#	#	P	#	P		#	P			
Bismarck, N. D.	2	P	#	P	P	P	P					
Center Line, Mich.	3	#	#	P	#	#	P			#		P
Chicago, Ill.	3*	#	#	P	#		P	#		P		
Clarkstown, N. Y.	2	#	#	#	#	P	P	P	P	#	P	P
Parsippany-Troy Hills Township, N. J.	2	#	#	P	P	P	P	#	#			
Penn Township, Pa.	1	#		P	P	P	P	#	P			P
Rye, N. Y.	1	#	#	P	#	P			#	P	P	
Southfield Township, Mich.	2	#	#	P	#	P	P		#		#	
Warren Township, Mich.	4	#	#	P	#	P	P		#			

Source: Planning Advisory Service Report No. 78, "Industrial Zoning Standards," (September, 1955) published by the American Society of Planning Officials.

# — Numerical standards used.

P — Included as a separate standard but numerical limits not used.

\* — Bulk sub-districts used to make a total of 11 different types of industrial zones.



prohibit glare or heat beyond the property lines. Apparently complete prohibition (a performance standard with a numerical value of 0) answers the requirements of communities which have used performance standards. Industrial wastes are often regulated by state health and stream pollution laws. The several zoning ordinances which include performance standards governing these emissions have specified maximum permitted amounts of poisonous substances or gases and standards on the volume of effluent, its acidity or alkalinity, and the size of solid particles.

Other standards cannot yet be considered generally applicable to all situations encountered in zoning. Included are effects which are most obnoxious and dangerous to near-by properties and to the community as a whole including noise, odor, noxious gases, vibration, and fire hazards; and those of relatively new and unexplored fields such as electromagnetic disturbances and radioactive emissions. It is in regulating these effects that performance standards are not yet effective because of the absence of sufficient scientific data on the characteristics of the effects or because administrative techniques have not yet been developed to take advantage of available measurement methods.

Noise control is an excellent example of the difficulty of applying scientific research to zoning. Three measures of sound are available: the decibel, a measure of sound pressure; the sone, a measure of the loudness of noise; and the noise level meter which measures sound in association with an octave band filter. Decibels can be measured directly by meters, but since low-pitched sounds are considerably less disturbing than high-pitched sounds of the same pressure, the decibel alone is not a satisfactory measurement. The sone is a computed measure of the loudness of noise as heard by the human ear. The sone, however, cannot be measured by instruments but must be computed from instrument readings which raises additional technical problems. The third method is used in the proposed Chicago ordinance and is the most scientifically prepared of the three, but the technical problems of all methods are formidable.

Some of the other effects, such as electromagnetic interference and radioactive emissions, are so technically involved that it is difficult for the layman to understand their nature much less attempt to regulate them at this time.

In their present state performance standards must be considered experimental. Some standards which now appear to be adequate will probably be replaced by better standards in the future. The technical and administrative problems involved in preparing and enforcing performance standards are clearly beyond the abilities of city employees. Most cities do not have the staff to interpret and enforce any but the simplest standards. Where apparently useful standards have been developed, they have been the result of intensive study. Where standards have been copied from other ordinances by uninformed people, however, glaring errors have usually crept in. Improvements in standards can only be accomplished by research, not by the uncritical adoption of standards which do not apply to conditions encountered in zoning or by copying provisions from other performance standards ordinances.

Many planners have avoided performance standards when called upon to prepare zoning provisions for industrial districts. Even in ordinances where standards are used, lists of permitted and prohibited uses are still present. From a review of the technical standards and administrative procedures now in effect, it is apparent that performance standards have not yet been perfected.

#### Lot Area and Building Bulk Controls

Zoning regulations which affect the size of building lots and the volume, shape, and spacing of buildings on the property are termed as area and bulk controls or regulations, as distinguished from use controls which regulate the activities permitted on the land and in buildings. The basic objectives of such regulations are: (1) to establish approximate densities of population in the various use districts, (2) to regulate the volume of buildings, (3) to afford access of light and air into buildings and the space surrounding them, and (4) to provide open space for the use of residents.

The bulk of buildings has been traditionally controlled by setting a maximum limit on permitted height by specifying the percentage of lot that may be built upon, and the minimum size of front, rear, and side yards and of courts. Density is chiefly controlled by specifying the minimum number of square feet of lot area per family or per use or the number of dwelling units permitted per acre.



Density requirements are most important in regulating residential development, but minimum area requirements are sometimes required in commercial and industrial districts.

Minimum lot size and lot frontage requirements are found in most zoning ordinances, and the highest minimum area requirements generally are for single family residences. Of 656 cities reporting on this aspect of zoning regulations to the 1955 Municipal Year Book, only 42 reported having no lot size requirements for single family residences and only 53 no frontage regulations. The median lot size for cities in all population groups was 5,000 square feet, except for cities in the 10,000 to 25,000 population group which was slightly higher — 5,600 square feet. The median of minimum frontage was 50 feet except for cities over 500,000 where it was 41 feet.

Some ordinances go considerably beyond the minimum lot sizes described above. A few ordinances in communities with estate-type developments have minimum lot sizes as large as three acres.

These usual bulk and area controls have been generally effective in providing for desirable residential development in areas of single-family homes, but they often have been less than satisfactory for high-density, multifamily dwellings; commercial buildings; and industrial uses. The effect of many bulk control regulations has been to establish rigid requirements as to design which often have been uneconomical, unattractive, and have not achieved the best results in light and open space.

Regulation of building volume or bulk requires a control which is (1) equally applicable to residential and nonresidential structures; (2) directly applicable to the buildings and does not depend on occupancy; and (3) insofar as possible, a quick direct measure of the capacity of the permitted buildings for the convenience of builders and of public agencies concerned with services affected by the capacity of buildings.

"Floor-area ratio" is a relatively recent device which has been developed to control the overall bulk of buildings. The floor-area ratio is an index figure, such as 1.0 or 3.0, which expresses the total permitted floor area of a building as a multiple of the area of the lot. With a floor area ratio of 1.0, the permitted floor area equals the lot area; with a floor area ratio of 5.0, the permitted floor area equals five times the lot area. The floor area ratios permitted vary with the use districts depending on the nature of the use and the type of development desired.

A simple illustration of this principle is shown in Figure 1. The floor area ratio of 1.0 applies to a one-story building with 100 per cent lot coverage, which is rarely permitted. A two-story building with 50 per cent lot coverage would have the same floor area ratio of 1.0 as would a four-story building with 25 per cent lot coverage.

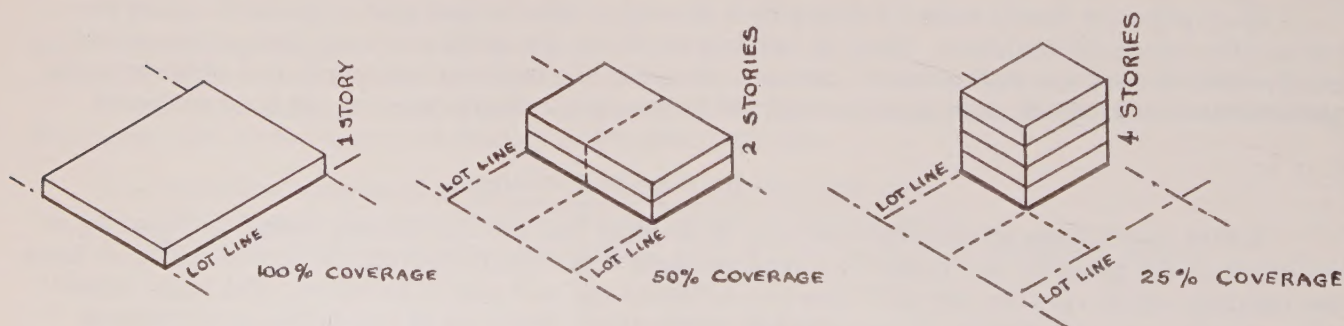


Figure 1

Illustration of Floor Area Ratio



While the floor area ratio establishes the maximum amount of floor area that may be built on a specific lot in a given use district, it does not by itself determine bulk of a building. This is done by combining the allowable floor area ratio with the zoning provisions of a district relating to (1) the percentage of lot that may be covered by a building; (2) the maximum permitted height of a building; and (3) front, side, and rear yard requirements. This allows property owners and architects considerable flexibility in designing a building for a given piece of property and yet protects adjacent property owners against the danger that bulky buildings will completely cut off all access to light and air.

For example, the Bismarck, North Dakota, zoning ordinance adopted in 1953 permits in the central business district a floor area ratio of 1.0 for single story buildings (lot coverage of 100 per cent) and a maximum of 5.0 for buildings of more than one story. The use district regulations also specify minimum building lot of 2,500 square feet and a maximum building height of nine stories.

Assume that a property owner has a minimum sized lot of 2,500 square feet and that he wishes to construct a building with the maximum floor area allowed by the zoning ordinance. The building could then contain a floor area of 12,500 square feet (lot area x floor area ratio = 12,500 square feet). Since the district regulations permit 100 per cent coverage, the owner could then obtain the maximum floor area with a five-story building.

Percentage of lot coverage, yard requirements, and floor area ratio regulations vary with the use districts depending on the nature of the use and the type of development desired. In the Bismarck, North Dakota, ordinance the highest provisions exist for the central business district and the lowest for single-family residence districts. Other high percentages and ratios are provided for multifamily dwelling districts, non-nuisance industries, and established commercial districts outside the downtown district. Lower provisions are required for industry with a high incidence of nuisance, two-family residences, and new neighborhood commercial districts.

The use of floor area ratios in zoning ordinances is quite limited. In addition to Bismarck, North Dakota, floor area ratio is included in ordinances for Clarkstown, New York; Grand Rapids, Michigan; Denver, Colorado; and proposed ordinances for Chicago and New York. Some planners feel that the floor area ratio is still experimental.

### Transitional Zoning

Although a comprehensive zoning ordinance is based on a land use plan incorporated in the master plan, the establishment of use district lines in the final analysis must be somewhat arbitrary and is therefore subject to the charge of inflexibility. Transitional zoning is a technique which makes special provisions for lots in one use district which border another district. This widely used technique is not new, however. For example, more than 50 municipalities in New York state have transition regulations in their zoning ordinances, with some of the provisions dating back to 1920.

The purpose of transitional zoning is to lessen the possible detrimental effects from development in less restricted use districts to the property at the edge of more restricted development. Such provisions may take the form of a slight reduction in the strictness of the requirements for the bordering lot in the more restricted district or of a strengthening of the requirements for the bordering lot in the less restricted district, and thus result in gradual tapering of restrictions rather than in a sharp dividing line.

Transitional zoning has been widely used to provide buffer zones for parking between residential districts and abutting commercial or manufacturing zones. Noncommercial parking lots in residential districts are permitted in many cities within a certain distance, such as 50 or 100 feet, of adjacent commercial or industrial uses. The ordinances usually specify that no charge may be made for parking in these areas and that the areas themselves must be improved and screened according to specified standards contained in the ordinance.

A typical provision for transitional parking use is contained in the Long Beach, California, zoning ordinance where outdoor parking space for automobiles may be provided in apartment house



districts if the use is confined to the area within 60 feet of an adjacent business district and if the parking area complies with uses incidental to apartment houses and adjoining stores.

Other uses in addition to parking lots may sometimes be permitted in the transitional zone between a residential and commercial or industrial district. In Antioch, California, two-family dwellings and doctors' offices and clinics as well as public parking areas are permitted in a single family residential district where the residential lot abuts a lot in the business or manufacturing district, provided the transitional use does not extend more than 100 feet into the residential district. Similarly, Long Beach, California, permits offices of professional persons, such as doctors and lawyers, as well as courtesy parking areas as a transitional use in an R-3 district where the lot abuts a commercial or industrial district.

The Fort Worth, Texas, zoning ordinance has a somewhat different provision which permits higher densities on a lot in one- or two-family residence districts where the lot is adjacent to a commercial zone. The board of adjustment may permit a two-family dwelling on a lot zoned for single family use which abuts a lot zoned for business purposes and may permit a four-family dwelling on a lot in a two-family residential district abutting a lot zoned for business uses.

Transitional zoning regulations may be included in the use district regulations to which they apply, which is desirable if it does not involve too much repetition. If the transitional provisions apply to several districts, however, it may be more convenient to place them in a group of supplementary regulations.

#### Off-Street Parking and Loading

Modern zoning ordinances require all new residential and most commercial buildings to provide off-street parking and in addition require commercial buildings to provide facilities for off-street truck loading. Generally this has been a post World War II development resulting from the increased number of automobiles in use and traffic congestion. Cities are learning through experience that a community eventually suffers when a builder is permitted to erect a structure that draws vehicular traffic but which fails to provide adequate off-street parking.

The 1952 Municipal Year Book showed that 296 cities over 10,000 population required off-street parking for newly constructed residential buildings. A total of 263 required off-street parking for newly built theaters, stores, warehouses, hotels, and other commercial establishments, and 178 required cities off-street truck loading facilities for commercial establishments. The Year Book figures do not show, except by implication, two serious shortcomings of many zoning ordinances: (1) the failure in most cities to provide off-street parking requirements in the central business district, and (2) the failure in most large cities to have any requirements at all.

The actual number of parking spaces to be required in relation to the building to be constructed will depend largely on local conditions. For example, most cities require one parking space for each single family residence. In Greensboro, North Carolina, any residential use consisting of one or more dwelling units must provide one parking space on the same plot for each dwelling unit. On the other hand, Windsor, Connecticut, requires two parking spaces for each dwelling unit occupying any lot in residential zones.

The Windsor ordinance requires that in business, professional, and industrial zones, parking space must be provided not farther than 400 feet from the particular building according to specific standards for theatres, stores, hotels, office buildings, restaurants, and other commercial and industrial properties.

Another development has been the establishment of so-called fringe parking areas in residential areas near the central business districts of cities. The Greensboro, North Carolina, zoning ordinance which permits noncommercial parking lots in residential districts also provides for parking lots in residential districts to be operated in conjunction with near-by (not more than 120 feet) commercial and industrial uses.

Off-Street Loading Requirements. Much of the traffic congestion in commercial and industrial districts results from the lack of off-street loading spaces. Many cities now require that



commercial and industrial users of certain sizes provide one or more loading berths or spaces for trucks loading and unloading either inside or outside of buildings.

Sizes of loading berths vary. The proposed New York ordinance requires a space of at least 33 by 12 feet, except where there is more than one berth, the width of the berths may be 10 feet each. For enclosed berths, the minimum height would be at least 12 feet. The Greensboro, North Carolina, ordinance requires loading berths with minimum dimensions of 12 by 25 feet and 14 feet overhead clearance. A loading space, which is not necessarily a full berth, must be sufficient to allow normal loading and unloading operations of a kind and magnitude appropriate to the property served. In no case can the use of a loading space hinder the free movement of vehicles and pedestrians over streets, sidewalks, or alleys.

The Greensboro, North Carolina, ordinance covers all types of commercial and industrial establishments with requirements related to types of business and gross floor area in square feet.

### Motels and Trailer Camps

Zoning for motels and trailers and trailer camps often creates special problems for city planning officials. Most communities, however, do not establish separate districts for these uses. Motels are often restricted to high density residential districts or their use is permitted as special exceptions in several districts. The same is generally true of trailers and trailer camps which are often confined to commercial or industrial districts. There are some examples, however, of cities that have created special districts for these types of uses.

The Clarkstown, New York, zoning ordinance adopted in 1955 establishes a "summer colony district" which permits the following uses: (1) uses permitted in the residential-agricultural district, (2) two family residences, (3) boarding or rooming houses, (4) hotels, motels, and tourist homes, and (5) summer colonies. Recreational facilities, such as athletic fields, tennis courts, swimming pools, bathhouses, and recreation halls, are also permitted in the district provided that no recreation facility is located within 200 feet of any residential district boundary. Special regulations are specified for accessory signs, minimum required off-street parking space, and minimum off-street loading berths.

The Colorado Springs, Colorado, ordinance provides a "tourist zone" for tourist courts and trailer coach parks. The ordinance permits the development of tourist courts within residential districts provided strict requirements are met. These requirements cover minimum lot area per family, off-street parking, accessory uses, signs, site plan, and physical facilities. Trailer coach parks are permitted when the tourist zone is combined with certain manufacturing and commercial districts. The park operator must get a permit every year from the city health officer and must comply with sanitation, fire, site, and other requirements.

A line should be drawn between the two types of facilities. The motel (or tourist court or auto court) is a permanent type of structure serving usually as transient housing for persons staying from one night to a few weeks. It serves the same basic purpose as a hotel. As a land use, assuming proper zoning, it is an essential part of many communities.

The trailer park or mobile home court (better terms perhaps than trailer camp) more and more is serving as a relatively permanent home for its inhabitants. The trailer park can be an acceptable part of community development provided that high standards are set by zoning, safety, and public health ordinances. Trailer parks fill a housing need for several groups including university students, construction workers, and the retired.

It is possible to accommodate motels and trailer parks together with other service facilities (gas stations, garages, and restaurants) in a highway-use district. By selecting certain areas of heavily traveled highways, these districts can provide beneficial land use for areas poorly suited for other types of development.

### Nonconforming Uses

A nonconforming use is a use existing prior to the establishment of the zoning regulations for



the district in which it is located and which does not conform to the district use regulations. A nonconforming use actually may be of three types: (1) buildings or structures which do not conform with use regulations; (2) buildings and structures which do not conform to height, yard, minimum area or lot coverage regulations; and (3) land with no buildings or structures (open land uses) which does not conform to use regulations.

Nonconforming uses can be found in almost every city where zoning ordinances have been adopted. Typical examples are occasional grocery stores or service stations in residential districts; an apartment house in a single family district; industrial uses in commercial districts; and billboards in a residential district or along the roadside.

The traditional zoning policy has been to permit nonconforming uses to continue to the extent and in the same manner that they existed at the time the zoning regulations were adopted, but they are not permitted to expand or enlarge or to be changed to a less restricted use. Ordinary repairs of a structurally sound nonconforming building are normally permitted but not structural alterations which would permit the building to expand. While the majority of zoning ordinances permit the continuation of existing nonconforming uses, they at the same time contain provisions to take advantage of occurrences which help to eliminate the uses. If a building in which a nonconforming use is being conducted is destroyed to the extent of the greater part of its value, it cannot be rebuilt; if a nonconforming use of land ceases, it cannot be resumed; and if a nonconforming use of a building ceases for a specified period longer than a reasonable period between tenants, the use cannot be resumed. The details of such zoning regulations vary considerably, but the foregoing principles are generally accepted.

Originally it was felt that such provisions would gradually eliminate nonconforming uses over a period of years. This has not been the case, however, and there is a strong feeling among planners that more positive means should be taken to eliminate nonconforming uses.

Nonconforming uses often can be eliminated if the regulations are reasonable and standards are provided. Some years ago Edward M. Bassett in his authoritative study, *Zoning*, stated: "There is little doubt that under zoning ordinances municipalities, if they wish, can succeed in ousting nonconforming uses and buildings. If the police power can be invoked to prevent a new nonconforming building because of its relation to the community health, safety, morals, convenience, and general welfare, it follows that the police power can be invoked to oust existing nonconforming uses." Bassett also pointed out that while the police power theoretically is broad enough to carry out this function, the courts would not uphold any such measures which were arbitrary and unreasonable.

In providing for the removal of nonconforming uses the zoning ordinance must consider the rights which a nonconforming use is generally regarded as having acquired. It is generally felt that these rights basically mean that any investment made in buildings or other improvements should enjoy a reasonable life. The reasonableness of terminating nonconforming uses of land (junk yards and billboards) is rather clear since they do not involve an investment in any fixed improvement designed for a special purpose. This also applies to a building which had been constructed for a conforming use such as a dwelling but which is being used for a nonconforming purpose. There is nothing in either situation which prevents development or resumption of a legally conforming use after a reasonably short period of continuance.

Where substantial improvement in the form of special purpose buildings, such as a garage, store building, warehouse are involved, the question of equity then arises. Protection of the reasonable life of any investment, however, can be provided by allowing a reasonable period of time for the amortization of the investment and when completely amortized, the nonconforming structure theoretically ceases to exist financially. Its capital cost has been repaid with interest.

A special study of municipal zoning policies for nonconforming uses was made for the 1955 Municipal Year Book. Of the 820 cities reporting, 706 cities had provisions to regulate nonconforming uses, but only 245 cities had zoning ordinance provisions for the eventual elimination of three nonconforming uses in residential, commercial, and industrial districts: (1) open land use (junk yards, auto wrecking yards, and so on), (2) billboards, and (3) buildings and other structures.

Open land uses must be eliminated in residential districts in 101 cities, in commercial



districts in 108 cities, and in industrial districts in 43 cities. Billboards were to be eliminated in residential districts in 144 cities, commercial districts in 54 cities, and industrial districts in 25 cities. Buildings and other structures must be eliminated eventually in residential areas in 144 cities, in commercial areas in 73 cities, and in industrial areas in 40 cities. In all three use districts, open land uses were the most prominent nonconforming use to be eliminated followed by buildings and other structures and billboards. The use district in which the most nonconforming uses (58 per cent) were to be eliminated was the residential district, followed by commercial and then industrial.

As indicated, the elimination of open land and billboard nonconforming uses is the most prominent in zoning ordinances and most easily attained. A good example of such a provision in a city ordinance is contained in the Bismarck, North Dakota, ordinance reproduced below:

*"Nonconforming Uses: Period of Continuance"*

"Certain nonforming uses, indicated in the following table, shall be discontinued at the expiration of the period of time shown, or at the expiration of one extension period . . . :

<u>"Nonconforming Use"</u>	<u>Period of Continuance</u>	<u>Limit of Extension</u>
Loam stripping	30 days	10 days
Garbage, trash dump	30 days	10 days
Livestock feeding	90 days	90 days
Junk, auto wrecking yard	180 days	30 days
Sand, gravel extraction	1 year	60 days
Other open uses of land	1 year	60 days
Billboard	180 days	30 days "

Elimination of nonconforming buildings and structures is much more difficult. Few city zoning ordinances attempt to use the amortization method of elimination of buildings but rather rely on provisions depending upon fire, acts of God, or abandonment to eliminate the structure.

The proposed revised zoning ordinance for Chicago provides for use of the amortization method. An amortization schedule is set up based on assessed valuation and type of construction. At the end of the amortization period allotted to a particular classification of building or structure designed for a nonconforming use, the building or structure would either have to be removed or else be redesigned and converted for a conforming use.

The provisions are specifically designed to eliminate nonconforming buildings and structures, that is, those specifically constructed and designed to accommodate a nonconforming use. The Chicago ordinance contains additional regulations for the termination of nonconforming uses in buildings themselves conforming (for example, a business located in a one- or two-family dwelling in residence district). Since only termination of the nonconforming use is required to bring about conformity and no remodeling of the building is necessary, shorter amortization periods are prescribed in such cases. In residence districts, nonconforming business, commercial, or industrial uses located in conforming buildings would be terminated within five years while in all other districts within 10 years. Nonconforming uses of land only, or where a building or structure of less than \$2,000 valuation is located, would be required to terminate within two years.

Nonconforming uses are very difficult to eliminate, but it is important if state law permits that some provisions be incorporated into zoning ordinances to insure the eventual removal of most nonconforming uses. Permitting nonconforming uses to exist indefinitely defeats the purpose of zoning as a means of obtaining orderly development and growth of cities.

Further Suggestions

The above sections of this report have suggested the major developments in zoning which warrant consideration by city officials in the drafting or revision of their own ordinances. It cannot be



emphasized too strongly that an effective zoning ordinance must be based on a land use plan. This means obtaining the services of qualified planners. Cities also can obtain valuable assistance by subscribing to Planning Advisory Service conducted by the American Society of Planning Officials (1313 East 60 Street, Chicago 37, Illinois). Further information about Planning Advisory Service is shown in MIS Report No. 149, "Professional Organizations of Municipal Officials," June, 1956, p. 1280.

Any city official engaged in the drafting or revision of a zoning ordinance would do well to consult the recent publication "Zoning Advances in the New Jersey-New York-Connecticut Metropolitan Region" (Regional Plan Association, 205 East 42 Street, New York 17. 1956. 32pp. \$5). The report contains an extended discussion of recent trends in zoning, references to numerous court decisions, material on zoning administration including appeals and variances, and guides to the technical steps in drafting a zoning ordinance.

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